

AMENDMENTS TO THE CLAIMS:

Please cancel claim 2. Claim 1 is currently amended.

The following listing of claims will replace all prior versions of claims in the present application. No new matter has been added to the claims.

Listing of Claims:

1. (Currently Amended) A method for local application of diffusion aluminide coating on areas of a metal component to be exposed to a high temperature gas, comprising:

a component preparation step of exposing local areas (damaged areas of an existing coating) of a base material of a metal component to be coated, and roughening a surface of the base material to a desired surface roughness;

a slurry preparation step of preparing a coating slurry that contains a halide activator, a water soluble organic binder, and powder of an aluminum-containing intermetallic compound, wherein TiAl_3 or $\alpha\text{-TiAl}_3$ having a theoretical aluminum ratio of 62.8% by weight and containing 0.5% or less impurities is used as the intermetallic compound;

an applying/drying step of applying the coating slurry to the local areas of the metal component, and then drying the local areas;

a packing step of packing the metal component in a heat-resistant container filled with alumina powder;

a diffusion treatment step of retaining the heat-resistant container at high temperature in an inert atmosphere or a reducing atmosphere to diffuse aluminum onto the surface of the metal component; and

a cleaning step of taking out the metal component from the heat resistant container, and removing a slag from the surface of the metal component.

2. (Cancelled)

3. (Previously Presented) A local application method of diffusion aluminide coating according to claim 2, wherein the coating slurry is prepared using AlF_3 as the halide

activator, and mixing the coating source and the activator at a weight ratio of 93 to 97: 3 to 7, while using the water soluble organic binder.

4. (Previously Presented) A method for local application of diffusion aluminide coating according to claim 1, wherein in the applying/drying step, the applying and the drying are repeated alternately to obtain a slurry thickness of 0.5 mm or more.

5. (Previously Presented) A method for local application of diffusion aluminide coating according to claim 1, wherein in the diffusion treatment step, the heat-resistant container is retained at 1900 to 2000°F (about 1038 to 1094°C) for about 2 to 9 hours.

6. (Previously Presented) A method for local application of diffusion aluminide coating according to claim 1, wherein the metal component is a blade, vane, shroud or combustor of a gas turbine.